Indiana Department of Environmental Management

INDIANA Wetland Program Plan

TABLE OF APPENDICES

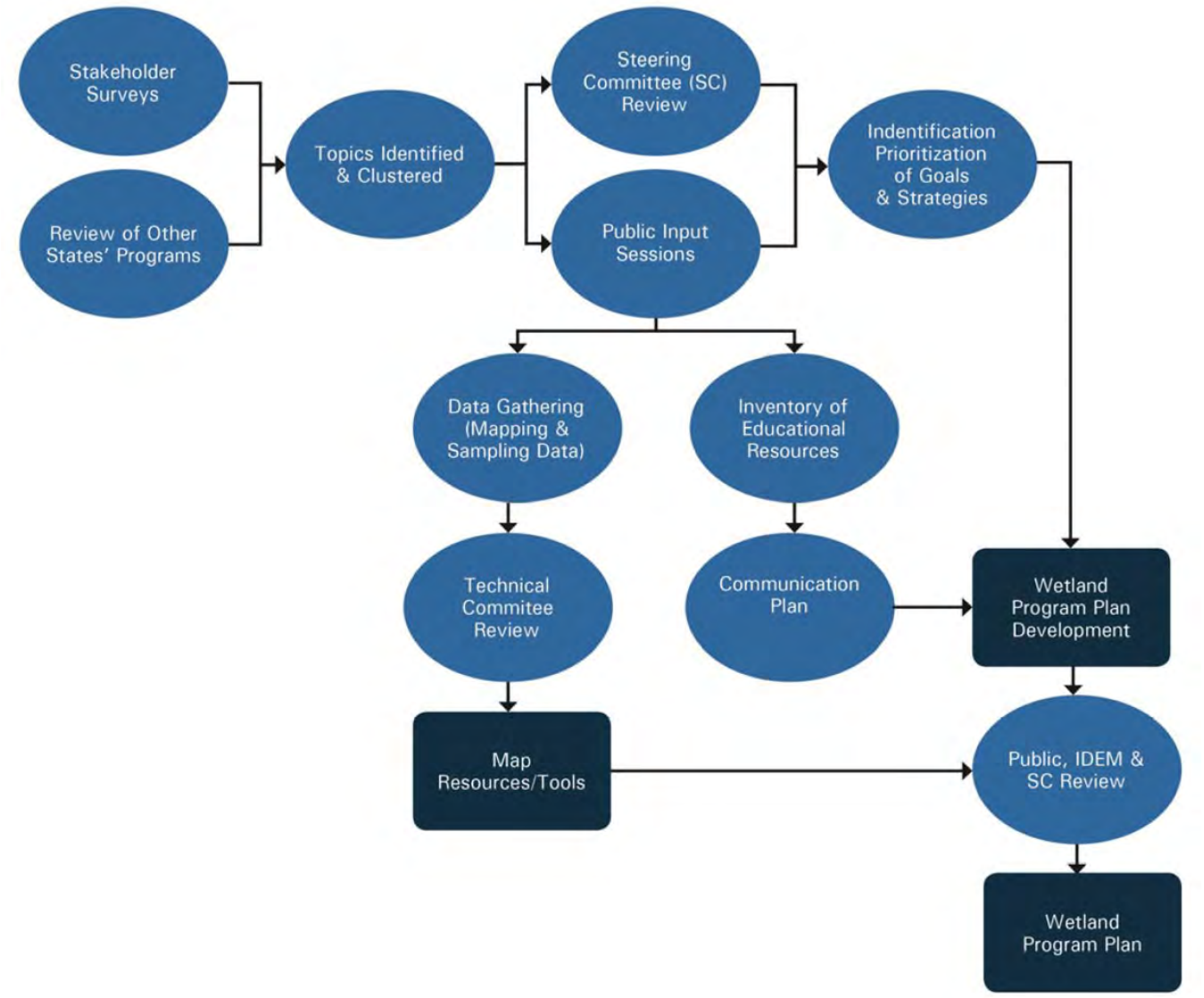
APPENDIX A

Wetland Program Plan Input Process and Stakeholder Data

1.1 Wetland Program Plan Input Process

The State of Indiana viewed development of this Wetland Program Plan (WPP) as an opportunity to reach out to all stakeholder groups and include them in the process of identifying priorities and goals. This process and associated outcomes are explained below.

Figure 1. Process of Developing Wetland Program Plan



1.2 Identification of Interested Parties

Steering Committee

During the early stages of the WPP development, IDEM and its partners identified Indiana's agency leaders in wetland regulation. These individuals were invited to serve as the WPP Steering Committee. The Steering Committee's role is to provide feedback on Plan development and to ensure that their representative agencies would stand behind the plan with support and leadership.

Table 1. Steering Committee

NAME	AGENCY	AGENCY WEBSITE
Martha Clark-Mettler	Department of Environmental Management	www.IN.gov/idem/
Mary Hollingsworth	Department of Environmental Management	www.IN.gov/idem/
Beth Admire	Department of Environmental Management	www.IN.gov/idem/
Randy Braun	Department of Environmental Management	www.IN.gov/idem/
Aaron McMahan	Department of Environmental Management	www.IN.gov/idem/
John Davis	Department of Natural Resources	www.IN.gov/dnr/
Jordan Seger	State Department of Agriculture	www.IN.gov/isda/
Logan Garner	State Department of Agriculture	www.IN.gov/isda/
Jane Hardisty	Natural Resources Conservation Service	www.usda.gov/
Shannon Zezula	Natural Resources Conservation Service	www.usda.gov/
Gregory McKay	US Army Corps of Engineers	www.lrl.usace.army.mil/
Sue Elston	US Environmental Protection Agency	www.epa.gov/
Scott Pruitt	US Fish and Wildlife Service	www.fws.gov/
Scott Morlock	US Geological Survey	www.usgs.gov/
Megan Shoda	US Geological Survey	www.usgs.gov/

Stakeholders

This group was designed to represent all wetland interests in Indiana and was open to anyone that wanted to be involved. This included regulatory agencies at every level, consultants, private citizens, county governments, watershed groups, land trusts, and other non-profit organizations. A list of participating stakeholder organizations is provided in section 1.4 of Appendix A.

Surveys

IDEM and its partners conducted a comprehensive survey in the beginning phase of WPP development to gather preliminary information about the knowledge, opinions, and available data related to wetlands from the stakeholders. This initial survey led to more specific data collection from respondents within the group, including mapping data of high priority wetlands for conservation, educational materials, wetland quality assessments, and views on the current wetland mitigation process. The survey questions and a graphic representation of answers are included with the supporting materials. A contact list of stakeholders with wetland data and/or resources is provided in section 1.5 of Appendix A.

Input Sessions

Regional stakeholder meetings were held in February 2014 in northern, southern, and central Indiana. IDEM and its partners summarized the scope of work included for the development of the plan and provided participants feedback from the original surveys. This allowed attendees to understand the overall wetland knowledge of the survey respondents and the concerns raised. The stakeholders then had an opportunity to identify priorities and rank them in relative importance. The priorities presented were gleaned not only from the original survey data but also from IDEM Section 401 staff input, other states' WPP strategies, and a review of EPA's WPP guidance. A summary of results from the stakeholder meetings are included in Section 1.3 of Appendix A . In summary, the priorities identified during the stakeholder meetings were:

- Increase wetland education
- Locate wetland resources
- Protect and increase wetland resources
- Understand wetland functions, values, and quality
- Develop statewide leadership

1.3 Summary – Wetland Program Plan Survey

What is the most important thing the state should be working on related to wetlands?

- An improved understanding (by public) of the value of wetlands; awareness/appreciation
- More research/scientific data; Standardization of data collected and make it publically accessible
- Mapping tools to help ID all existing wetlands and call-out high quality wetlands
- Mapping and other resources to help with restoration planning and promotion
- Increase functional assessments of wetlands, including function within a watershed
- Better mitigation projects ; evaluation of monitoring data; focus on water quality designs and connectivity to other conservation landscapes
- Quantify the economic values of wetlands

- Free technical assistance to landowners
- Increase incentive programs to restore more wetlands, particularly with famers
- Increased compliance between the public and regulatory; greater awareness of regulations; regulatory consistency
- Stronger regulation; coordination with Drainage Act; clarify questionable jurisdictional resources; limit development; Implement strict legal protection of high quality wetlands; protect what is left
- Expanding wetland banks; developing in-lieu fee programs;
- Improve stream water quality with wetland enhancement; more stormwater wetlands or city zoning/protection of wetlands near impaired streams; retention pond retrofits with wetland areas
- Strategies and programming for invasive species control
- Buy up more wetlands via property acquisition; increase conservation funding
- Dedicate a State Wetland Coordinator(s); more human resources dedicated to coordinating wetland projects

Stakeholder Meeting - Ranking Exercise

What is the most important thing the state should be working on related to wetlands?

Figure 2: Stakeholders Highest Wetland Priority

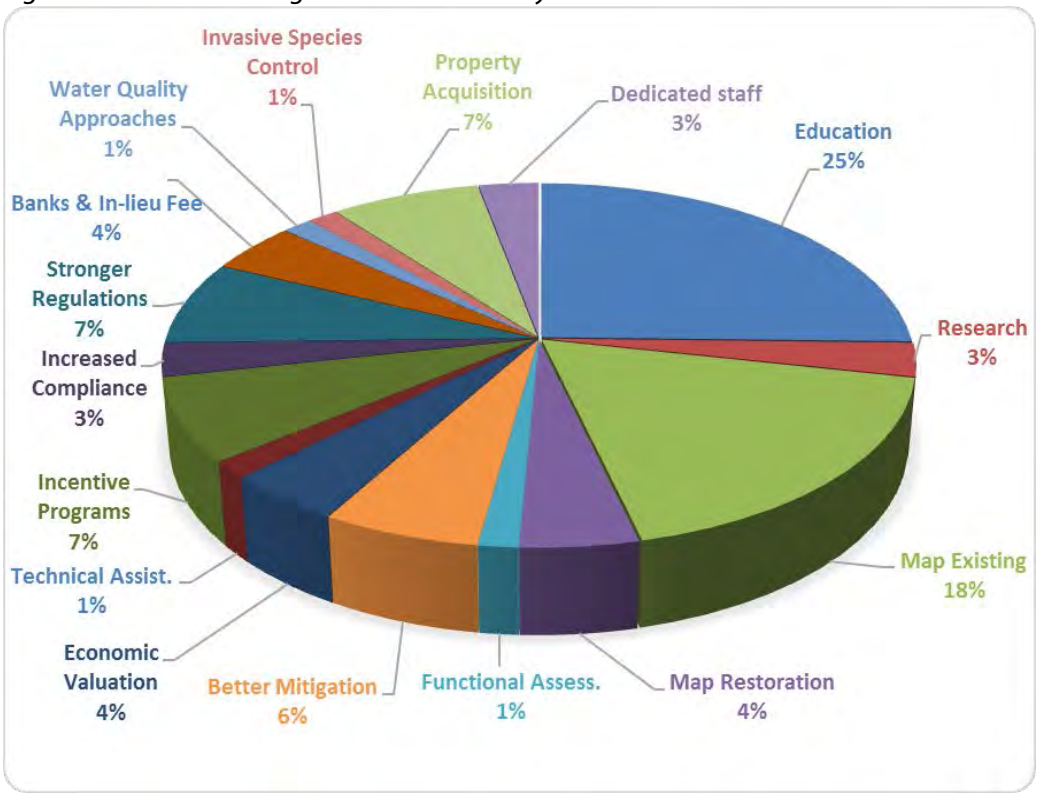
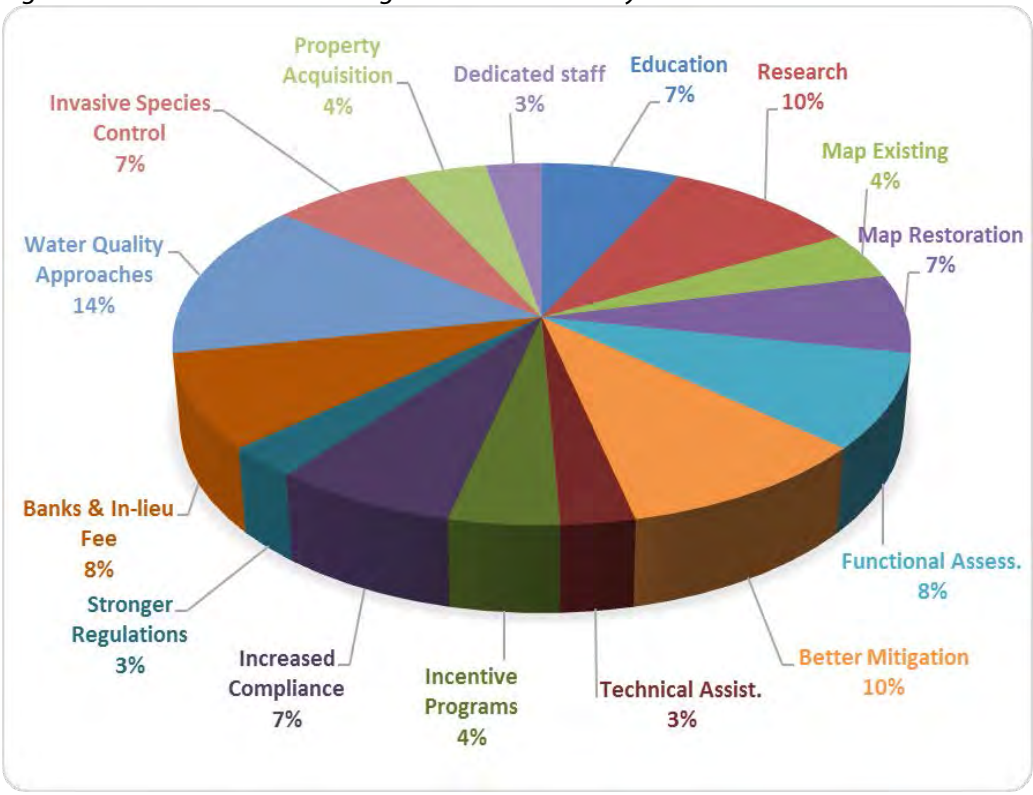
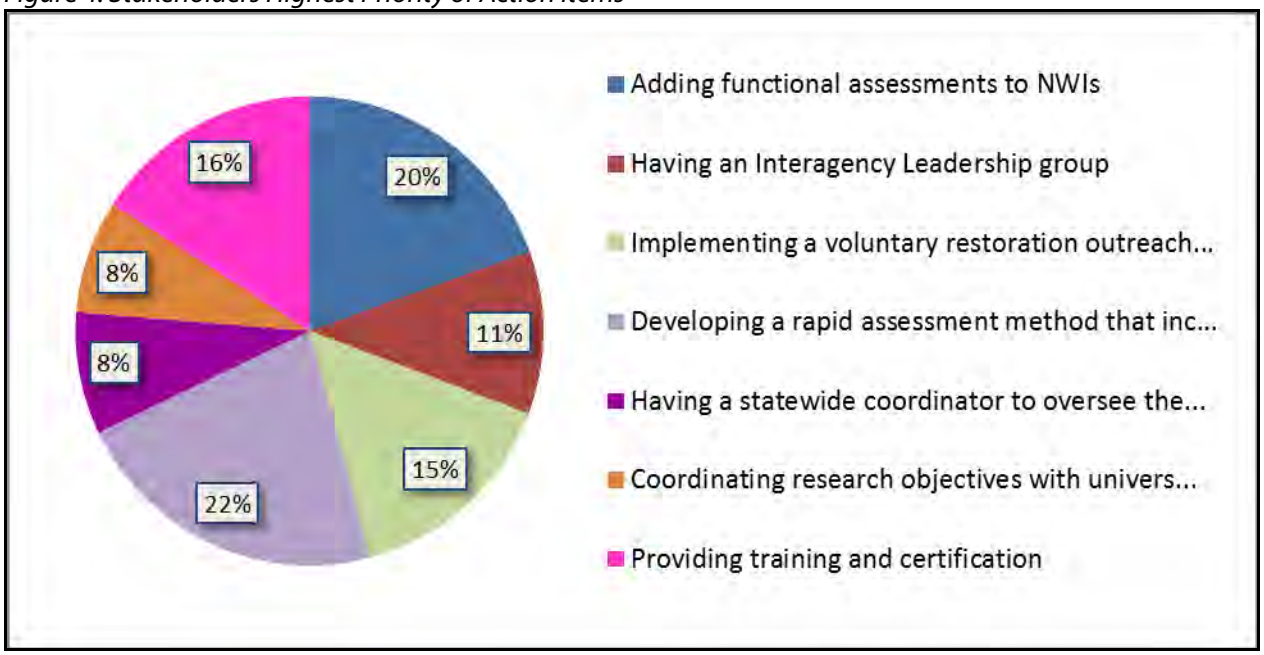


Figure 3: Stakeholders Second Highest Wetland Priority



Of the other state's efforts, what idea seems the most important or valuable?

Figure 4: Stakeholders Highest Priority of Action Items



1.4 Participating Organizations (in alphabetical order)

101 Lakes Trust
11th Street Development
Allen County Partnership for Water Quality
Allen County Surveyor's Office
Alliance
American Environmental Corporation
American Society of Landscape Architects, Indiana Chapter (INASLA)
American Structurepoint
AquaTerra Consulting, Inc.
Arborterra Consulting Inc.
ARCADIS
August Mack Environmental, Inc.
Avant Gardens Development LLC
Ball State University Department of Geological Sciences
Beam, Longest and Neff, LLC
Bernardin-Lochmueller
Bledsoe Riggert Guerrettaz, Inc.
Blue Heron Ministries, Inc.
Blue Marble Design, LLC
Butler, Fairman, and Seufert, Inc.
Cardno JFNew
Central Indiana Land Trust
CHA Consulting, Inc.
Christiana Creek Coalition
Christopher B. Burke
Citizens Energy Group
City of Auburn Indiana
City of Goshen
City of Noblesville
City of Valparaiso
Civil & Environmental Consultants
CJ Seto Support Services
Clark County Soil and Water Conservation District
Clay County Soil & Water Conservation District
Clear Lake Township Land Conservancy, Inc.
Clear Lake Water Quality Committee Interested citizen
Clinton County Soil and Water Conservation District
Coffee Creek Watershed Conservancy, Inc.
Commonwealth Biomonitoring
Conservation Technology Information Center (CTIC)
Davey Resource Group
Dearborn County Indiana
DECA Environmental & Assoc., Inc.
DeKalb County Soil and Water Conservation District
DLZ Indiana, LLC
Ducks Unlimited, Inc.
Eagle Creek Watershed Alliance
Earth Source, Inc.

Easterday Construction Co., Inc.
Eco Logic LLC
EcoSource Inc.
Elkhart County Soil and Water Conservation District
Elkhart Environmental Center
Elkhart River Restoration Association, Inc.
Engineering Resources Inc.
EnviroForensics
EPA Region 5
ERM
Fanning Howey Assoc.
FBT Environmental Services LLC
Flat Lake Watershed
Flat Land Resources, LLC
Force Design, Inc.
Franklin County Soil and Water Conservation District
Friends of Big Blue River healthy communities of Henry County
Friends of Cedar Creek
Friends of the St. Joe River Association
Gibson County Coal, LLC
Golars Environmental
Grace College, Center for Lakes & Streams
Hamilton County Surveyors Office
Hancock County Soil and Water Conservation District
Hancock County Surveyor
Historic Hoosier Hills RC&D
Hoosier Energy REC, Inc.
Hopf Environmental
Howard County Storm Water District
Huntington County Surveyor
HydroTech Corp.
Indiana Department of Environmental Management, Natural Resource Damage (NRD) Program
Indiana Department of Environmental Management, Office of Water Quality
Indiana Department of Environmental Management, TMDL Program
Indiana Department of Environmental Management, Watershed Assessment and Planning Branch
Indiana Department of Environmental Management, Wetlands and Storm Water Section
Indiana Department of Natural Resources, Division of Fish & Wildlife
Indiana Department of Natural Resources, Division of Fish and Wildlife, Lake and River Enhancement Program
Indiana Department of Natural Resources, Division of Fish and Wildlife, Public Lands Program
Indiana Department of Natural Resources, Division of Nature Preserves
Indiana Department of Natural Resources, Division of Nature Preserves, Lake Michigan Coastal Program
Indiana Department of Natural Resources, Division of Water
Indiana Department of Transportation, Environmental Services
Indiana Finance Authority, State Revolving Fund Loan Program
Indiana Karst Conservancy
Indiana Rural Community Assistance Program
Indiana Rural Water Association
Indiana Smallmouth Alliance
Indiana Society of Professional Land Surveyors, Inc.
Indiana State Department of Agriculture
Indiana State University

Indiana University, Bloomington
Indiana University, Center for Geospatial Data Analysis
Indiana University-Purdue University Fort Wayne Department of Biology
Indiana University-Purdue University Indianapolis, Center for Earth and Environmental Science (CEES)
Indianapolis Department of Public Work, Land Stewardship
Izaak Walton League of America, Indiana Division
Jennings County Soil and Water Conservation District
Jimmerson Lake Association
Kankakee River Basin Commission
KCI Technologies, Inc.
La Porte County Soil and Water Conservation District
Lagrange County Surveyor
Lake Lemon Conservancy District
Lake Maxinkuckee Environmental Council
LaPorte County Conservation Trust
Little River Wetlands Project
Lower Salamonie River Watershed Project
Madison County Soil and Water Conservation District
Madison County Surveyor
Manchester University
Marion County Health Department
Marshall County Surveyor
Monroe County Soil and Water Conservation District
Mud Creek Conservancy
National Park Service, Indiana Dunes National Lakeshore
Natural Resource Consultant
New Albany City Plan Commission
NICHES Land Trust
Northwestern Indiana Regional Planning Commission
Oak Park Conservancy District
Office of Indiana State Chemist (Pesticides)
Optimal Air Testing Services
Patoka Lake Watershed Committee
Porter County Plan Commission
Purdue University, School of Civil Engineering
Putnam Co. Soil and Water Conservation District
Red-tail Land Conservancy
Redwing Ecological Services, Inc.
Roux Associates, Inc.
Rush County Soil and Water Conservation District
Sanitary District of Michigan City
Santis Environmental
Save Maumee Grassroots Org.
Save the Dunes
SEH of Indiana
SES Environmental
Shafer and Freeman Environmental Conservation Corporation
Shirley Heinze Land Trust
Sierra Club Hoosier Chapter
Soil Solutions, Inc.
Spence Restoration Nursery

St. Joseph River Basin Commission
Stantec
Starr Associates
Steuben County Lakes Council
Steuben County Soil and Water Conservation District
Sullivan County Soil and Water Conservation District
Taylor University
The Conservation Fund
THE Engineers, Inc.
The Nature Conservancy
Tippecanoe Watershed Foundation
Tipton County Government
Town of Zionsville
Triad Mining, Inc.
U.S. Army Corps of Engineers, Louisville District
United States Department of Agriculture (USDA), Farm Service Agency (FSA)
United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS)
University of Notre Dame
Urban Waters Federal Partnership
URS Corporation
US Geological Survey (USGS)
Valparaiso Department of Water Works
Vermillion County Soil and Water Conservation District
Wabash River Enhancement Corporation
Ward Enterprises, Inc.
Warren County Soil and Water Conservation District
Wawasee Area Conservancy Foundation, Inc.
Wells County Surveyor
West Central Indiana Watershed Alliance
Wetland Services
Williams Creek Consulting

1.5 Stakeholder Data List

Table 2. List of people who have collected data on wetlands and are willing to share data, results from initial WPP survey.

Bolded people also said they are willing to meet.

Name:	Organization:	What types of Data do you have?			
		Water Quality Data	Habitat assessments	Wildlife assessments	Other
Matthew Smedley	IDEM-Office of Water Quality	X	X		Wetland quality data, stream assessments, wetland assessments
Matt Meersman	Friends of the St. Joe River Association		X	X	
Robert Barr	CEES/IUPUI				Hydrologic assessments
Brian Catt	Williams Creek Consulting	X	X	X	
Jim Sweeney	Porter County Chapter Izaak Walton league of America	X			SOS/Riverwatch
Brad Shoger	KCI Technologies, Inc		X	X	Soil and hydrology data.....
Greg Gerke	Civil & Environmental Consultants	X	X	X	
Tim Sandefur	Wetland Services	X	X	X	
William Etzler	Engineering Resources Inc	X	X	X	
Rachele Baker	Civil and Environmental Consultants		X	X	Hydrology data, floristic data
Ashlee Haviland	IDNR Division of Fish and Wildlife, Lake and River Enhancement Program	X			
Randy Bayless	USGS	X			Hydrologic data - GW/SW/VZ and plant biology in proximally located restored and natural wetlands
Summer O'Brien	CHA Consulting		X		Wetland delineation, FQA, functional assessments
Katie Rizer	Coffee Creek Watershed Conservancy, Inc	X	X	X	
John J. McQuestion	Soil Solutions, Inc.		X	X	
Jason Hignite	CJ Seto Support Services		X		
Alicia Douglass	Davey Resource Group		X		
Michael Sertle, Regional Biologist	Ducks Unlimited, Inc.		X	X	We conducted the NWI update for the USFWS. We regularly conduct, or support, wetland research.
Bob Daum	National Park Service; Indiana Dunes National Lakeshore	X	X	X	
Cassie Hauswald	The Nature Conservancy				Floral surveys
Christopher Craft	Indiana University, Bloomington		X		Ecosystem functions - denitrification, N and P stroage and accumulation, C

Name:	Organization:	What types of Data do you have?			
		Water Quality Data	Habitat assessments	Wildlife assessments	Other
					sequestration, biomass, plant biodiversity
David Troup	Elkhart River Restoration Association, Inc.	X	X		Flow data
Julian J. Lewis, Ph.D.	Indiana Karst Conservancy				
Linda Mahan	Rush County SWCD	X			
Brian Shaw	Beam, Longest and Neff, LLC		X	X	
Nate Bosch	Center for Lakes & Streams, Grace College		X		
Sally Letsinger	Indiana University, Center for Geospatial Data Analysis				Hydrologic data, soil moisture data
Elizabeth McCloskey	LaPorte County Conservation Trust			X	Frog calling surveys
William Keith Crim, P.E.	THE Engineers, Inc.		X	X	
Mary Baird	Flat Lake Watershed	X	X	X	Some incomplete data
Debbie Collinsworth	EcoSource Inc.	X	X	X	
James Van Tassel, Lake Biologist	Lake Lemon Conservancy District	X		X	
Ron L. Dixon	Natural Resource Consultant	X	X	X	
Peter Hippensteel	Steuben County Lakes Council	X			
Paul Quinlan	Shirley Heinze Land Trust		X		
Barry Banks	Red-tail Land Conservancy				Plant Inventories by BSU Botany classes
Dorreen Carey	Indiana Department of Natural Resources Lake Michigan Coastal Program	X	X	X	
John Shuey	The Nature Conservancy		X	X	
Betsy Yankowiak	Little River Wetlands Program	X		X	… citizen science programs … recorded 219 bird species at our Eagle Marsh preserve.
Kevin Tungesvick	Spence Restoration Nursery		X		
Annie Skinner	Clear Lake Township Land Conservancy, Inc		X		
Cliff Chapman	Central Indiana Land Trust		X	X	
Sarah Wright	CBBEL		X		Floristic Quality Assessments
Peg Zeis	Clear Lake Water Quality Committee Interested citizen	X			
John Bacone	IDNR Division of Nature Preserves		X		

Name:	Organization:	What types of Data do you have?			
		Water Quality Data	Habitat assessments	Wildlife assessments	Other
Kathy Clark	Lake Maxinkuckee Environmental Fund	X	X	X	
Allen Chesser	The Lake Maxinkuckee Environmental Council	X	X	X	
Daniel mason	National Park Service/Indiana Dunes National Lakeshore	X	X	X	
Frank Smietana	Mud Creek Conservancy	X	X	X	
Ronald Turco	Purdue University	X			
Jeff Bolinger	Fanning Howey assoc.		X		
Thomas J. Warrner	INDOT		X		
Nathan Simons	Blue Heron Ministries, Inc.		X		
Lee J. Florea	Ball State University Department of Geological Sciences	X			
Greg Bright	Commonwealth Biomonitoring	X			
Sarabeth Klueh-Mundy	Indiana Department of Natural Resources Division of Fish and Wildlife			X	
Nathan Saxe	Indiana Department of Transportation		X		ORAM and INWRAP data
Laban Lindley	U.S. Army Corps of Engineers, Louisville District		X		… generally based on a project specific basis when needed for permitting purposes or a jurisdictional determination……
Tadd Boman	Friends of Cedar Creek	X			
Paul E Rothrock, Ph.D.	Taylor University		X		
Robert Wolfe	Cardno JFNew	X	X	X	
Steve Schmidt	Madison County SWCD		X		
Nicole Barker	Save the Dunes	X	X		
Robert Jacko	School of Civil Engineering, Purdue West Lafayette	X	X	X	
Jason DuPont	Bernardin-Lochmueller		X		
John Ulmer	Eagle Creek Watershed Alliance	X	X		
Toby	Alliance	X	X		
Gus Nyberg	NICHES Land Trust		X		
Timothy Skiver	Earth Source, Inc.		X	X	Wetland mitigation monitoring data

Name:	Organization:	What types of Data do you have?			
		Water Quality Data	Habitat assessments	Wildlife assessments	Other
Neal Bennett	Butler, Fairman, and Seufert, Inc.	X	X	X	
Karen M. Mackowiak	St. Joseph River Basin Commission				Functionality assessments and prioritization
Scott Morlock	USGS	X	X		
Christie Kallio, Project Engineer	Hamilton County Surveyors Office	X			
Carl Wodrich	DNR		X		
Drew Bender	Cardno JFNew	X	X	X	
Marc Woernle	Cardno JFNew	X	X	X	
Thomas P. Simon, PhD	Indiana State University	X	X	X	
Elisabeth Solchik	IDEM	X	X	X	
Shannon Zezula	USDA Natural Resources Conservation Service (NRCS)		X		

Table 3. List of people who have maps of Priority Wetland Conservation Areas and are potentially willing to share data, results from Initial Survey. **Bolded people indicated a willingness to meet.**

Name:	Organization:	Do you have a map of priority wetland conservation areas?	Do you have plans to collect any such data in the future?
Matthew Smedley	IDEM-Office of Water Quality	Yes	Yes
Matt Meersman	Friends of the St. Joe River Association	Yes	Yes
Robert Barr	CEES/IUPUI	Yes	Yes
Eric Ellingson	Earth Source Inc	Yes	Yes
Brian Catt	Williams Creek Consulting	Yes	Yes
Jim Sweeney	Porter County Chapter Izaak Walton League of America	Yes	Yes
Brad Shoger	KCI Technologies, Inc	Yes	Yes
Michael Sertle, Regional Biologist	Ducks Unlimited, Inc.	Yes	Yes
Jennifer McKee	Clay County Soil & Water Conservation District	Yes	No
Bob Daum	National Park Service; Indiana Dunes National Lakeshore	Yes	Yes
Cassie Hauswald	The Nature Conservancy	Yes	No
Paul Quinlan	Shirley Heinze Land Trust	Yes	Yes
Jon Ruble	SEH of Indiana	Yes	No
Barry Banks	Red-tail Land Conservancy	Yes	Yes
Dorreen Carey	Indiana Dept of Natural Resources -Lake Michigan Coastal Program	Yes	Yes
John Shuey	The Nature Conservancy	Yes	Yes
Betsy Yankowiak	Little River Wetlands Program	Yes	Yes
Kevin Tungesvick	Spence Restoration Nursery	Yes	No
Annie Skinner	Clear Lake Twp. Land Conservancy, Inc	Yes	Yes
Cliff Chapman	Central Indiana Land Trust	Yes	Yes
Sarah Wright	CBBEL	Yes	Yes
Jason Henderson	Tipton County Government	Yes	No
Peg Zeis	Clear Lake Water Quality Committee Interested citizen	Yes	Yes
John Bacone	IDNR Division of Nature Preserves	Yes	Yes
Kathy Clark	Lake Maxinkuckee Environmental Fund	Yes	Yes
Allen Chesser	The Lake Maxinkuckee Environmental Council	Yes	Yes
Daniel Mason	National Park Service/Indiana Dunes National Lakeshore	Yes	Yes

Name:	Organization:	Do you have a map of priority wetland conservation areas?	Do you have plans to collect any such data in the future?
Om Narla	Golars Environmental	Yes	
Michael H. Novac	Indiana Rural Community Assistance Program	Yes	No
Drew Bender	Cardno JFNew	Yes	Yes
Joe Exl	Northwestern Indiana Regional Planning Commission	Yes	No
David Trotter	Clark County SWCD	Yes	No
Nancy Brown	Elkhart County SWCD	Yes	
Gary Langell	IDNR Division of Fish and Wildlife	Yes	No
Kayleen Hart	Steuben County Soil and Water	Yes	Yes
Brad Smith	The Nature Conservancy	Yes	No
Sarah Brichford	Howard County Stormwater District	Yes	No
Heather Harwood	Wawasee Area Conservancy Foundation, Inc.	Yes	Yes
Angela Tilton	DNR- Division of Fish & Wildlife	Yes	No
Shannon Zezula	USDA Natural Resources Conservation Service (NRCS)	Yes	Yes
Sue Bock	IDEM OWQ	Yes	
Heather Parsons	IDEM	Yes	Yes
Marty Maupin	Indiana Department of Environmental Management	Yes	No
Bryan R. Wallace	Oak Park Conservancy District	Yes	No
Kiersten Fuchs	Redwing Ecological Services, Inc.	Yes	
Jennifer Kipper	USDA-NRCS	Yes	
Susan Bodkin	Hancock County Surveyor	Yes	
Simon Davies	CHA Consulting	Yes	
Michelle Lassiter	City of Auburn Indiana	Yes	
Jim Smith	IDEM - NRD Program	Yes	
Mike Molnar	DNR - LMCP	Yes	
Kevin Berger	Easterday Construction Co., Inc.	Yes	
Scott E. Fetters	U.S. Fish and Wildlife Service, Northeast Indiana Habitat Restoration Office		
Logan Garner	ISDA Division of Soil Conservation		
Joe Robb	USFWS		

APPENDIX B

Communication Planning Matrix

Communication Planning Matrix

Audience	Who specifically is included	Special Messages/Considerations	Venues	Tools
General Public		General awareness and appreciation; wide-spread PR/marketing campaign for wetlands; make wetlands a cherished resource; improve technical understanding of wetland values in broad sense	Local grassroots efforts - booths at events; social media; IDEM website; IDNR Hoosier Outdoor Experience (HOE); Pathway to Water Quality at State Fair; SWCD field days; promote and create events for American Wetlands Month (May); wetland tours	Activities for booth or presentations- displays, interactive simulations of how wetlands work, good photos; print pieces explaining wetlands and uniqueness, etc.; list of wetlands available for tours; tour script and maps; interpretive signage; promo materials/swag
Targeted Land Owners	Land owners w/ high priority sites	Why restore wetlands, wetlands and their value, how easements work	Direct mail; outreach via SWCDs/NRCS, TNC, land trusts; one on one meetings,	Letters, maps, print pieces showing value of wetlands, photos, etc., testimonial videos with land owners who have installed or restored wetlands showing off their property; NRCS easement newsletters
Farmers	All farmers and farmers with notable restoration sites, especially those in highly impacted areas (both recent or historic impacts/losses)	Value of wetlands; regulations; available conservation and restoration programs and technical assistance contacts	Outreach via SWCDs/NRCS, Farm Bureau, ISDA, Co-ops; enews list serves ; mailings to those in high priority conservation areas	Tours of wetlands; testimonial videos with land owners who have installed or restored wetlands showing off their property; booth at State and County Fairs; possible award for wetland-friendly farmer; letter and program promotional materials
Agency Partners	USACE, INDOT, DNR, NRCS, ISDA, SWCDs, Illinois-Indiana Sea Grant	Various regulatory roles and regs; knowledge of each others programs; need for shared information	SWCD annual conference; one on one meetingss with key agency contacts; presentations at staff events/agency annual employee retreats/ conferences (IDNR's Division of Fish and Wildlife is in the winter)	Presentations; single document overview that summarizes various programs
County Surveyors		When permits are needed; best practices to protect wetlands when doing maintenance work; two-stage ditch practices (linear wetlands)	County Surveyors Assoc/Annual Mtg, IN Assoc of Counties, INAFSM, LTAP Drainage Conferences	PowerPoint focused on regulations; Dredging/Filling/Excavating brochure, Waterways brochure; webinars; revised/expansion of TNC's two-stage ditch brochure/factsheet

Communication Planning Matrix

Audience	Who specifically is included	Special Messages/Considerations	Venues	Tools
Municipalities (MS4 coordinators, planners, engineers)		Values of wetlands; cost/impacts of loss; mitigation failure rates; regulatory tools/solutions for protection at state and local level; when permits are needed; when and how wetlands can be used for stormwater mgmt.; methods for protecting wetlands in the planning phase/conservation design practices;	IACT, stormwater workshops, INAFSM, LTAP Drainage Conference, MS4 annual mtg	PowerPoint focused on regulations; PowerPoint focused on wetlands as stormwater BMPs; Dredging/Filling/Excavating brochure, Waterways brochure; webinars on the new mapping tools; short narratives/updates for enews, and social media posts about the new mapping tools; activity kits to show INAFSM education team at their committee mtg
Public Officials	Mayors, Town Managers, Legislators, Plan Commission/BZA members	Values of wetlands; cost/impacts of loss; mitigation failure rates; regulatory tools/solutions for protection at state and local level;	IACT; tailors workshop/mtg for Officials; mailings; Indiana Citizen Planner training	Presentations; economic valuation of wetlands; Dredging/Filling/Excavating brochure, Waterways brochure
Consultants		Value of wetlands; regulations; mitigation failures rates; conservation site planning tools; economic benefits of wetlands; wetlands and stormwater mgmt.; wetland assessment techniques; restoration considerations and guidance; government wetland programs for landowners	IACT, Stormwater workshops, INAFSM, IWEA, IWRA, LTAP Drainage Conferences, Annual MS4 mtg; enews list serves via professional organizations	Presentations; economic valuation of wetlands; Dredging/Filling/Excavating brochure, Waterways brochure; Green Site Planning Tool (see thewhiteriveralliance.org website); training modules/workshop content; GIS tools; short blurbs in organizations' newsletters; monitoring and itigation/restoration guidance and/or tools
Developers/Contractors		Value of wetlands; regulations; mitigation failures rates; conservation site planning concepts and tools; economic benefits of wetlands; wetlands and stormwater mgmt.	Direct mail; stormwater workshops; email (MS4s have good contacts); IN Builders Assoc. and Builders Assoc. of Greater Indianapolis (BAGI) mtgs and publications; Chamber of Commerces mtgs	Presentations; economic valuation of wetlands; Dredging/Filling/Excavating brochure, Waterways brochure;
Realtors		Value of wetlands; how to ID wetlands (basics); regulations; conservation tax abatement programs	IN Assoc of Realtors, Metropolitan Indianapolis Board of Realtors (MIBOR); individual offices (lunch and learns or staff mtgs)	Presentations; residential brochure

Communication Planning Matrix

Audience	Who specifically is included	Special Messages/Considerations	Venues	Tools
Conservation Groups and Sustainability Departments; bio, forestry and natural resources departments at universities	Watershed groups, land trusts, DU, TNC, INPAWs, Indiana Wildlife Society; university sustainability departments (IUPUI, Purdue, etc.), resource management part of parks depts., etc.	Regulations; mitigation failures rates; conservation site planning tools; top conservation priority sites/areas; economic benefits of wetlands; wetland assessment techniques; restoration considerations and guidance; government wetland programs for landowners	Indiana Native Plant and Wildflower Society (INPAWs) conference (fall), Indiana Parks and Recreation Association (IRPA) conference (winter), Indiana Wildlife Society fall and spring conferences; enews list serves; enews list serves; one-on-one mtgs	Presentations, short blurbs in organizations' newsletters; high priority conservation sites maps; monitoring and mitigation/restoration guidance and/or tools
Teachers		Values of wetlands; general regulations; wetland ID (basics); wetland assessment tools (basics); what educational resources are available for classroom use; new scientific research on wetlands,	Hoosier Association of Science Teacher Conference (HASTI); EEAI (conference, newsletter, etc.); IDNR DFW and facilitator WOW workshops; IDEM Hoosier Riverwatch newsletter; local wetland fieldtrips or field day	Conference sessions, short blurbs in newsletters highlighting new programs, etc.; tours script and maps; WOW curriculum
Informal educators	Interp/naturalists at parks departments, museum staff (ISM, Conner Prairie, Science Central, etc.); private camps (ACA)	Values of wetlands; general regulations; wetland ID (basics); wetland assessment tools (basics); use and availability of new teaching tools; new scientific research on wetlands	National Assoc. of Interpretation (NAI) region 5 conference (held in IN periodically), Environmental Education Association of Indiana (EEAI) conference (fall), Indiana Park and Recreation Association (IPRA (winter); 4H leader training (spring and fall); IDNR interpreter training (spring); American Camp Association (ACA) conference	Presentations; examples of new teaching tools; new print, etc. - materials that they can distribute at their parks, etc.
Youth		General appreciation; value of wetlands	School curriculum, Girl and Boy Scouts, 4H, field days sponsored by SWCDs or land trusts or watershedalliances/associations, naturalist programs at parks, HOE, field trips to wetlands	Activities from WOW curriculum; Celebrate Wetlands kids publication from Project WET; list of wetlands available for tours; 4H Soil and Conservation Project (Marsh Modeling); DU Puddler Magazine; promo materials

APPENDIX C

Existing Wetland Programs and Activities

Existing Wetland Programs and Related Activities

1 Overview of Wetland Regulatory Programs

1.1 Clean Water Act Section 401 and Isolated Wetland Permits

The Indiana Department of Environmental Management administers the Clean Water Act (CWA) Section 401 Water Quality Certification program for wetlands and Waters of the US. Wetlands which are considered isolated are regulated in Indiana under IC 13-18-22 which requires a permit to conduct an activity within a state regulated wetland.

> **Wetland Definition:**
> *"Waters" are defined in IC 13-11-2-265 as "the accumulations of water, surface and underground, natural and artificial, public and private; or a part of the accumulations of water; that are wholly or partially within, flow through, or border upon Indiana" and include wetlands as they are defined as Waters of the US in the federal Clean Water Act. Wetlands are further defined in IC 13-11-2-265.7 as "areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." Wetlands are determined to be present and the boundary delineated from upland areas utilizing methodology established by the Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1 and associated Regional Supplements. In Indiana, there are three regional supplements covering the state; Northcentral and Northeast Region, Midwest Region, and Eastern Mountains and Piedmont Region, which are defined by the land resource regions.*

The Section 401 Water Quality Certification and Isolated Wetland Permit programs review proposed impacts to wetlands within the state to determine compliance with approved terms and conditions. When an impact exceeds the acreage allowed under the Nationwide Permit program or Regional General Permit program, an Individual Permit is required. Within the Individual Permit program the applicant must provide a justified purpose and need for the impacts, assess the project for avoidance and minimization measures, and then provide mitigation for the remaining impact acreage. Mitigation must occur within the same 8-digit watershed hydrologic unit code (HUC), be of the same wetland type, and provide a wetland of equal or greater size than impacted. These measures are established with the intent of no "net loss" of wetlands for the state of Indiana. Mitigation may be accomplished though permittee responsible mitigation, mitigation banks (limited availability), and in-lieu fee (potentially coming in 2015). Guidance for developing a mitigation plan is available in the 2008 Mitigation Rule (CFR Part 332 – Compensatory Mitigation for Losses of Aquatic Resources).

1.2 Clean Water Act Section 404

The US Army Corps of Engineers (USACE) administers the Clean Water Act Section 404 Dredge and Fill Permit program in Indiana. Three USACE districts have responsibility within the state; Chicago District, Detroit District, and the Louisville District. The USACE has final authority over the jurisdictional determination of "Waters of the US" (WOTUS) and wetlands adjacent to or abutting a WOTUS. Recent clarification over the USACE jurisdiction of wetlands (Clean Water Act Proposed Rule for Definition of Waters of the U.S.) was made available to the public for comment in April 2014 to define commonly used terms such as WOTUS, tributary, and neighboring, as well as identifying features that are non-jurisdictional. The intent of the new rule is to improve consistency within the program and enhance protection of the nation's aquatic resources.

A permit is required for construction activities occurring within a WOTUS and jurisdictional wetlands. In order to determine regulated impacts, a wetland delineation must be conducted on the property and a report submitted to the USACE for verification and a jurisdictional determination.

1.3 Flood Control Act and Lake Preservation Act

The Indiana Department of Natural Resources (IDNR) regulates wetlands through the Flood Control Act IC 14-28-1 and the Lake Preservation Act IC 14-26-2. Wetlands that fall within the regulated floodway of a stream or the waterline of a public freshwater lake are subject to IDNR's permit review process for construction activities.

2 Overview of Wetland Restoration and Conservation Programs

A variety of organizations engage in voluntary restoration and protection, both governmental agencies and non-governmental organizations (NGOs), including formal non-profits and more loosely organized local groups. The largest program efforts are listed below.

2.1 U.S. Department of Agriculture (USDA)

2.1.1 Wetland Reserve Easements (WRE)

The Natural Resource Conservation Service (NRCS), a section of the USDA, administers an Agricultural Conservation Easement Program (ACEP) which provides funding and technical assistance to landowners wishing to conduct wetland restoration activities. The ACEP was initiated in 2014 to cluster easement based programs together and encompasses the previous Wetland Reserve Program (WRP), now known as Wetland Reserve Easements (WRE). NRCS has established priority areas/zones in the state for this program, however it is open to all landowners. Those projects located in a priority area simply rank higher in the application review process. The program aims to restore enrolled acreage to a condition as close to historical conditions as possible. Perpetual maintenance is required on the projects and some monitoring is conducted.

2.1.2 Environmental Quality and Incentives Program (EQIP)

EQIP provides cost-share program dollars to four types of wetlands projects/practices as defined in the NRCS Field Office Technical Guide (FOTG) (i.e. enhancement, restoration, creation (not historic wetland), and constructed wetland (nutrient filtering wetland/flow through). While EQIP funding is available statewide through a competitive application process, there are high priority areas and initiative areas that help reduce the competition of these funds in certain locations. EQIP projects are mapped and summary data (by watershed) could be provided by NRCS to other agencies upon request. These locations/data cannot be made public however due to privacy commitments.

2.1.3 Conservation Reserve Program (CRP)

CRP, through the Farm Service Agency (FSA) section of the USDA, pays farmers up to 90% of the restoration costs of wetland projects. The CRP program, however, requires a past cropping history on the property for it to be eligible for restoration cost-share funding. The Conservation Reserve Enhancement Program (CREP), through a partnership with the USDA and Indiana State Department of Agriculture (ISDA), is an additional incentive program that provides financial payments (signing bonuses) on top of CRP funds to encourage voluntarily enrollment in certain high priority CRP areas. CRP projects are mapped and summary data (by watershed) could be provided by NRCS to other agencies upon request. These locations/data cannot be made public however due to privacy commitments.

2.1.4 Food Security Act Qualifiers

No federal incentive or restoration program dollars can be utilized if a farmer is out of compliance with wetland regulations as defined within the Food Security Act. As part of the 2014 Farm Bill crop insurance and subsidies payments will also be withheld from farmers who are out of compliance with wetland regulations.

2.2 IDEM Non-Point Source Section

Section 319(h) and 205(j) of the Clean Water Act provide funding for projects that are designed to reduce nonpoint source watershed pollution, including assessments, watershed management plans, technical assistance, education and outreach. In recent years, 205(j) funding has been reserved for planning projects and special initiatives. Section 319(h) funding can include wetland restoration projects so long as they have been identified as a tool to improve water quality associated with an impaired or degraded stream in a critical area. Critical areas are defined by the watershed management planning process. It is worth noting that these programs are among the few programs in the state that fund education initiatives. IDEM oversees both the 205(j) and 319(h) programs.

2.3 U.S. Fish and Wildlife Service

The U.S. Fish and Wildlife Service administers several programs related to the restoration and protection of wetlands in Indiana. In addition, the USFWS provides technical assistance in the form of the Conservation Planning Assistance Program.

2.3.1 North American Wetland Conservation Act (NAWCA)

Through the USFWS, grants are awarded to individuals and organizations for the purpose of implementing conservation projects. These grants support long term protection, restoration, and/or enhancement of wetlands and associated upland habitats.

2.3.2 Partners for Fish and Wildlife

The Partners for Fish and Wildlife Program, in Indiana, has identified nearly 100 partners and assisted over 2,000 landowners with wetland restoration projects. The Partners program can assist with technical and financial assistance for projects which conserve or restore vegetation, soils, or hydrology with priority given to habitats that benefit Federal Trust Species. This program has identified priority areas for future restoration.

2.4 Indiana Department of Natural Resources (IDNR)

The IDNR houses several programs and contains a wealth of resources that positively impact wetland conservation and restoration. The Division of Fish and Wildlife and Division of Nature Preserves are two such examples of programs directly restoring and protecting wetlands.

The Division of Fish and Wildlife provides for the protection, reproduction, care, management, survival, and regulation of wild animal populations. This inherently includes the protection of aquatic and terrestrial habitat through land acquisition, conservation easements, reserve programs, partnerships, improved land use, and educational strategies. The Healthy Rivers Initiative has purchased thousands of floodplain acres over the last several years along the Wabash and Muscatatuck Rivers. The Lake and River Enhancement Program (LARE) provides technical and financial assistance for qualifying projects.

The Division of Nature Preserves administers the nature preserve system. Nature preserves are dedicated under state law, IC 14-31-1. Currently there are over 250 nature preserves covering over 46,000 acres. Most nature preserves are owned by the state however some are owned by the Nature Conservancy, local Land

Trusts, cities, universities/colleges, and local County Park systems. The Division of Nature Preserves maintains several important programs that aid in the protection and restoration of wetlands:

- the Indiana Natural Heritage Data Center
- the Indiana Heritage Trust
- the Bicentennial Nature Trust
- the Lake Michigan Coastal Program.

A list of High Quality Natural Communities of Indiana has been populated and provides examples of known communities under protection. The Heritage Data Center maintains a list of Endangered, Threatened, and Rare Species in Indiana by County. Through the Indiana Heritage Trust Program, the Bicentennial Nature Trust, and the Lake Michigan Coastal Program Grants funding is available for acquisition and maintenance of properties meeting certain criteria.

The below listed IDNR programs also play a role in wetland restoration and protection.

- Classified Forest and Wildlands Program (tax abatement program)
- Project Wet and Project Wild (citizen and student education programs)
- The Hoosier Outdoor Experience (citizen hands-on experiential festival)

2.5 The Nature Conservancy (TNC)

The Nature Conservancy is a not-for-profit organization that works with landowners and partners to conserve and protect important natural lands and waters in Indiana. Much of this is accomplish by land purchase, restoration, and routine stewardship. TNC participates in both small-scale and large-scale restoration, with one of the most recent, largest projects being the restoration of thousands of acres of wetlands and floodplains along the Kankakee River in an area known as the Kankakee Sands. TNC prioritizes their efforts around areas known as Portfolio Sites. Portfolio Sites were established with the input of important partners like the IDNR Division of Nature Preserves and include high quality conservation targets as well as area that may buffer such targets or serve as important restoration areas. In addition to the Portfolio sites, TNC maintains a Top 10 list of specific sites that they target for conservation protection each year. Staff engages in direct landowner contact annually in regard to these sites. TNC protection and restoration efforts are accomplished by a variety of means. Restoration projects often involve programs like WRE and the Indiana Natural Heritage Trust. To a lesser degree, TNC engages in official 401/404 permitted mitigation projects as a tool to accomplish hydrology enhancements. Many of TNC's efforts are made possible via donations from private individuals.

2.6 Land Trusts

Several active land trusts exist around the state, each with a specific area of interest that defines the physical extent of their land protection work. Most are official 501(c)3 not-for-profit organizations and are therefore governed by a Board of Directors. Each land trust has its own unique way of establishing its conservation priorities. The overall efforts of these groups can be best tracked and coordinated via the Indiana Land Protection Alliance (ILPA). This group is a collaboration of land conservation organizations working around the state of Indiana. ILPA members meet quarterly and strive to improve the effectiveness of land protection efforts by land trusts and their partners. According to their website, collectively, the local land trusts in Indiana have protected more than 20,500 acres (2005 Land Trust Alliance Survey) of natural habitat, working lands (farms and forests) and other special areas.

2.7 Ducks Unlimited (DU)

Ducks Unlimited is a not-for-profit organization focused on protecting and expanding waterfowl habitat for migration, breeding and wintering waterfowl. Working with a variety of partners, DU's Indiana conservation program has restored and enhanced 26,450 acres of wetlands and adjacent habitat, according to their

website. Important restoration projects include work ongoing at Patoka River National Wildlife Refuge, Goose Pond Fish & Wildlife Area, and several other sites around the state. Much of DU's work is accomplished through creative partnerships with the US Fish and Wildlife Service, energy corporations, other non-profit partner organizations, and North American Wetlands Conservation Act (NAWCA) grants.

3 Overview of Wetland Monitoring and Assessment Protocols

3.1 Section 401 and Isolated Wetland Permits Mitigation Monitoring

Monitoring is required for mitigation sites permitted under a Section 401 WQC or Isolated Wetland Permit. The applicant must show that the success criteria are being met before they can be released from the permit. Success criteria typically include targets such as wetland size based on wetland delineation, wetland Cowardin type, presence and abundance of invasive species, tree stem density, bare ground or open water abundance, and any additional site specific criteria established in the mitigation and monitoring plan. Mitigation monitoring is required for a period of five to ten years, in which the success criteria are met in two consecutive years. In 2001, IDEM received a grant to study whether the mitigation program was successful in meeting the no net-loss goal. These reports are available on the idem.gov website: *Compensatory Mitigation: Inventory 2001*, and *Compensatory Mitigation: Area Analysis 2001*. At that time, it appeared that overall mitigation goals were not being fully achieved.

No protocols have been established by Indiana for wetland mitigation monitoring in the determination of success criteria acceptance except wetland delineation methodology. The USACE provides brief guidance on monitoring report contents in Regulatory Guidance Letter No. 08-03.

3.1.1 Isolated Wetland Classification

Indiana has defined isolated wetland classes based on several functional categories (IC 13-11-2-25.8). A Class I wetland is the lowest quality wetland and generally contains at least 50 percent disturbance by human activity and supports only minimal wildlife or aquatic habitat or hydrologic function. A Class III wetland is the highest quality wetland and is generally undisturbed, and supports more than minimal wildlife or aquatic habitat or hydrologic function, or is one of 18 rare or ecologically important types. A Class II wetland is not a Class I or Class III wetland, or would be a Class I wetland if it was not a rare or ecologically important type. It is required that an applicant for an Isolated Wetland permit assess the classification of the wetland to be impacted to determine the value of the potential loss and determine appropriate mitigation ratios.

3.1.2 Indiana Wetland Rapid Assessment Protocol (In-WRAP)

Indiana has developed a Wetland Rapid Assessment Protocol (In-WRAP) (Taylor University Environmental Research Group, 2005) to assess function in wetlands. This tool utilizes NWI polygons as the basis for building a wetland assessment. The tool then divides the wetland assessment into three tiers based on the level of information available, with Tier 1 being an overview and Tier 3 requiring scientific expertise. This tool is publicly available but is not being fully implemented by any State programs.

3.1.3 Floristic Quality Assessment

A floristic quality index was developed in Indiana under an EPA WPD Grant to provide additional measures for the assessment of plant community quality and function. The report titled *Floristic Quality Assessment in Indiana: The Concept, Use, and Development of Coefficients of Conservatism* (Paul E. Rothrock, 2004) is an analytical tool which includes metrics and techniques for vegetation monitoring to produce consistent results. This tool is publicly available but is not being fully implemented by any State programs.

3.2 Natural Resources Conservation Service Wetland Reserve Easement

The NRCS currently monitors wetlands within the previously described WRE program. Perpetual maintenance is required on these projects and some monitoring is conducted. This monitoring does not include formal assessments via a protocol but does document whether boundaries are intact (no encroachment), vegetation success, and if compatible uses are in check. A national geo-database is used to track the location of WREs and is public record.

3.3 IDEM Assessment Branch and Hoosier Riverwatch

IDEM currently routinely collects water quality data on streams throughout Indiana. These data are used to generate the Integrated 305(5) / 303(d) Report and to inform the TMDL (total maximum daily load) program. Data collection efforts conducted by IDEM are outlined in Indiana's Water Quality Monitoring Strategy and stored in the Assessment Information Management System (AIMS) database. Specific sampling protocols and Quality Assurance Project Plans (QAPPs) have been developed to direct sampling efforts. In addition, IDEM trains volunteers to conduct stream assessments in the Hoosier Riverwatch program. Currently, this program does not specifically collect data on wetlands.

3.4 Indiana Department of Natural Resources (IDNR)

The IDNR Division of Nature Preserves does not conduct formal monitoring on its wetland land holdings or easements. Regional biologists conduct rare species monitoring somewhat informally, noting increasing or decreasing populations.

3.5 The Nature Conservancy (TNC)

TNC does not engage in a lot of formal monitoring of its wetland properties; however, staff has utilized Dr. Paul Rothrocks' plant assessment protocols for habitat evaluations in the Dune Swale Areas of Concern in northern Indiana. TNC has also developed site specific protocols for evaluating restoration efforts such as the efforts in the Kankakee Sands area. These protocols often involve assessing plant communities inside a certain diameter circular plot, across certain distance intervals. Protocols are adapted to the size of the site and monitoring goals.

APPENDIX D

Interagency Wetland Leadership Group Work Plan

Interagency Wetlands Leadership Group

Years 1-3 Work Plan Topics

- Implement Interagency Wetland Leadership Group (INWLG); assign staff/admin to coordinate; develop annual work plans; engage a technical subcommittee when necessary
- Inventory training and assessment resources available throughout agencies
- Define statewide monitoring objectives
- Provide oversight in determination of functional assessment tools (LLWFA, ORAM, INWRAP, NRCS's field method); to ensure all partners on board with using it as the standard protocol
- Participate in regular stakeholder meetings to review maps/discuss new projects or efforts, ID restoration and conservation priority areas, track progress and outcomes
- Generate list of top 50 12 digit HUCs restoration priority areas; utilize watershed plans, TMDL assessments, and 12 digit HUC wetland loss analyses, to target wetland restoration priorities to improve impaired/threatened streams or restore watershed function
- Generate a top 20 list of high quality/priority wetlands and adjacent buffer lands desired for acquisition or easement; ID who owns the properties; determine if/who (which agency or partner group) may have approached them already
- ID what conservation programs are applicable for each Top 50 12 digit HUC priority area and each Top 20 conservation area
- ID what technical assistance is available in each Top 50 and Top 20 priority area; compile list of technical assistance contacts for each priority area
- Cross train between agencies on regulatory differences, funding assistance, tools, and protocols
- Develop standardized presentation(s) on various wetland restoration programs, wetland types/values, regulations, success stories; make available for web download
- Identify key messages for all future wetlands outreach efforts; standardize/unite messages across all agency and partner groups to increase repeated exposure of the public to those messages; update website to reflect key messages
- Plan for resources to develop comprehensive, publically accessible database

Years 4-5 Work Plan Topics

- Every two years evaluate cumulative permit impacts (losses) by watershed; map these for comparison with gains (restorations) and water quality impairments
- Utilize Top 20 conservation priority areas and Top 50 12 digit HUC restoration priority areas to guide planning initiatives and implementation funding across all programs (205j, 319, LARE, IHT, BNT, etc.)
- Engage in routine meetings with non-agency wetland protection/restoration partners to plan for projects, address challenges, and track project progress/outcomes
- Coordinate monitoring and implement universal protocols for monitoring and data storage
- Increase regulatory consistency between agencies when possible; utilize same assessment protocols
- Collaborate with researchers to select and pilot sites for continued or future water quality monitoring; coordinate with IDEM Assessment staff to ensure data achieves the highest standard for third party data

- Plan for resources to conduct regular updates to NWI maps every 10 years to allow for summarizing of wetland acreage and trends over time
- Develop consistent strategy to monitor success of restoration projects; develop wetland monitoring guidance document
- Develop volunteer restoration and conservation outreach program materials (introductory land owner letter, brochure explaining why wetland restoration is important in that area, technical assistance contact info, synopsis of all relevant financial incentive programs, etc.); add brochure and synopsis to website
- Continue to update/populate HPWCS map

Years 6-7+ Work Plan Topics:

- Develop indicators of success for landowners with new restorations (checklist, things to watch for, etc.); add to restoration/mitigation guidance document
- Establish a recognition/awards program for landowners; send thank you note/gift (i.e.. wetlands promotional items, see Goal 1); issue press releases in landowner's area; promote in wetlands e-new and social media
- Encourage partner orgs to do long-term monitoring to help understand the typical conditions of restored wetlands, best practices, pitfalls; submit data to monitoring database; Assess agency GIS resources and determine if/where there is capacity to routinely update wetlands GIS layers with data that has been submitted to new publically accessible database; ID and implement best way to keep GIS updated
- Develop dedicated position for statewide wetlands coordination (coordinate projects across departments, provide public education, orchestrate training programs, outreach to key partners, serve as support staff for INWLG)
- Review and track progress on WPP action items